Mumbai University

Question Paper

[CBSGS – 75:25 Pattern]
(April – 2017)

PAPER - III

DATA
WAREHOUSING

Time: 2 ½ Hours   **Total Marks:** 75

N.B.: **(1)** *All Question are Compulsory.*
      (2) *Make Suitable Assumptions Wherever Necessary And State The Assumptions Made.*
      (3) *Answer To The Same Question Must Be Written Together.*
      (4) *Number To The Right Indicates Marks.*
      (5) *Draw Neat Labeled Diagrams Wherever Necessary.*
      (6) *Use of Non – Programmable Calculator is allowed.*

Q.1   ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) What are the characteristics of a Data Warehouse?   **(5)**
(B) Differentiate OLTP and OLAP.   **(5)**
(C) Explain the different types of facts in a fact table with suitable examples.   **(5)**
(D) Differentiate Star and Snowflake Schema with respect to Data Warehouse.   **(5)**

Q.2   ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Why is it necessary to configure a listener before creating the Database? Explain the steps to configure a listener.   **(5)**
(B) What are the different components of OWB? Illustrate the same with a neat diagram.   **(5)**
(C) Explain the three windows in the OWB Design Center.   **(5)**
(D) What is the role of a DSN? What are the steps involved in configuring a DSN?   **(5)**

Q.3   ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Why is it necessary to create a target user and a target module while designing a DW in OWB?   **(5)**
(B) Differentiate Relational and Multidimensional implementation of a Dimensional Model in a Database.   **(5)**
(C) Why Time Dimension is considered a key part of most Data Warehouses? Explain the different characteristics of a dimension that has to be defined in an OWB.   **(5)**
(D) What are the Cube Details that can be seen for a cube in the Data Object Editor?   **(5)**

Q.4   ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) What is the significance of ETL while creating a Data Warehouse in OWB? How is this accomplished in OWB?   **(5)**
(B) Explain how an Aggregator data flow operator is used in mapping between sources and targets in OWB.   **(5)**
(C) Discuss in detail the constraints tab in the Data Object Editor in OWB.   **(5)**
(D) What is the role of a Joiner data flow operator in mapping sources and targets in OWB?   **(5)**

Q.5   ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Explain any three transformations operator in OWB.   **(5)**
(B) Why is a Key Lookup operator necessary in a mapping in OWB?   **(5)**
(C) Why is it important to validate the objects in a Design Center? What are the possible results after validation process?   **(5)**
(D) What are the default operating modes the mapping code can run in when executing in the database?   **(5)**

Q.6   ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) What is the significance of Snapshot in OWB?   **(5)**
(B) Why is it necessary to synchronize objects in OWB?   **(5)**
(C) Explain the terms Data Sparsity and Data Explosion with respect to a Data warehouse.   **(5)**
(D) Explain with a neat diagram the basic OLAP System Architecture.   **(5)**

[TURN OVER]

Q.7 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

(A) Explain Slowly Changing Dimension with a suitable example. **(5)**

(B) What are the steps involved in configuring repository and workspaces in OWB? **(5)**

(C) What are the Dimension Details that can be seen in the Data Object Editor? **(5)**

(D) List the properties seen in the property window of Aggregator operator. **(5)**

(E) Explain the columns in Object Details window under the Control Center Manager window in OWB. **(5)**

(F) What is the role of Recycle Bin in OWB? Explain. **(5)**